

**REMARKS**

Claims 1, 2, and 4-20 remain pending after this response.

**Claim Amendments**

By this amendment, an editorial revision is made to claim 5. New claims 18-20 are added. The limitations of new claims 18 and 19 reside in claim 11. The limitations of new claim 20 reside at page 98 of the specification. No new matter is added by this amendment.

**Allowable Subject Matter**

Applicants thank the Examiner for the indication of allowable subject matter of claims 12-17. However, for the reasons noted below, all pending claims are believed to define patentable subject matter.

**Rejection under 35 USC 102(b)**

Claims 1 and 2 stand rejected under 35 USC 102(b) as being anticipated by Shimada et al published U.S. patent application 2003/0054288. This rejection respectfully is traversed.

In support of the rejection, the Examiner states in the Action: "In Example 25, Shimada teaches (see [00283]-[0287]) a planographic printing plant precursor which comprises a substrate and a photosensitive layer, and the composition for the photosensitive layer contains a polymerization initiator (present

component (B)), an addition-polymerization compound (present component (C)), and a light-heat converting agent DX-1", with compound DX-1 being "shown in present specification (p. 27) as one of preferred examples for the present compound (A)".

Applicants previously attempted to distinguish over the reference on the ground that the presensitized plate of claim 1 has an image recording layer which is removable with printing ink and/or dampening water. This feature enables on-machine development with printing ink and/or dampening water without performing a wet development step using an alkaline developer.

On the other hand, in the planographic printing plate precursor according to Example 25 of Shimada, it is a prerequisite to perform the wet development step using an alkaline developer, with the on-machine development with printing ink and/or dampening water being impossible.

The planographic printing plate precursor according to Example 25 of Shimada uses a binder B-1 as shown in Table 2 at paragraphs [0286]-[0287] of the specification. Paragraph [0253] describes the binder as being "Allyl methacrylate/methacrylic acid/N-isopropylamide copolymer (copolymerization molar ratio: 67/13/20), acid value (measured by NaOH titration) 1.15 meq/g, weight-average molecular weight 130,000."

Binder B-1 has a strong carboxy group and is thus absorbed on the surface of the substrate. Therefore, unexposed areas of photosensitive layer of the planographic printing plate precursor

according to Example 25 of Shimada cannot be completely removed with printing ink and/or dampening water on the printing machine even if it is not cured. In particular, if printing is performed without performing the wet development step using the alkaline developer, portions of unexposed areas of the photosensitive layer remain on the substrate. Inks thus adhere to those portions.

As a result, dirt is generated on prints. Incidentally, if development is performed using an alkaline developer in the planographic printing plate precursor according to Example 25 of Shimada, this type of problem does not occur since the absorption of the carboxy group with the substrate is negated.

The Examiner states at page 5 of the Action in response to the above that the "present specification (see pg. 78 and 79) also lists (meth)acrylic resins (which clearly include the carboxyl group) as one of exemplary binders that can be used in the present invention (see also pg. 81, lines 10-11 where binders having carboxyl group are said to be preferred).

However, applicants note that polymethyl methacrylate (PMMA) which is a representative (meth)acrylic resin, does not include the carboxy group. Also, as can be seen from the (meth)acrylic resin being listed as an exemplary oleophilic binder, it is common for one skilled in the art to consider that the (meth)acrylic resin used as an oleophilic binder for the image recording layer of the planographic printing plate precursor does not include the

carboxy group. Thus, the Examiner's assertion that the (meth)acrylic resins "clearly include the carboxy group" is incorrect.

Also, in the present specification, other than the oleophilic binder mentioned above, a hydrophilic polymer can be used as a binder. The recitation in the present specification, as mentioned by the Examiner, reciting that the hydrophilic polymer having a carboxy group are preferred, relates to hydrophilic binders.

As is expected chemically, hydrophilic binders show overall hydrophilicity even with the presence of carboxy groups, and thus enable development with dampening water. In comparison, development with water is impossible when using the oleophilic binders because, when the carboxy group is present, the carboxy group is adsorbed on the support, as discussed above.

Therefore, the Examiner's assertion that the allyl methacrylate/methacrylic acid/N-isopropylamide copolymer (copolymerization molar ratio 67/13/20) used in Example 25 of Shimada which is an oleophilic binder can be developed with water based on the recitation that the hydrophilic binders having carboxy group are preferred, is not reasonable. That is, as the binder used in Example 25 of Shimada is an oleophilic binder, and the carboxy group is adsorbed on the support, development with water is not possible.

Accordingly, the planographic printing plate precursor according to Example 25 of Shimada does not correspond to an image

recording layer which is removable by printing ink and/or dampening water according to applicants' claimed invention. The claimed invention is accordingly not anticipated by the reference.

The rejection is thus improper, and should be withdrawn.

**Rejection of Claims 4-9 under 35 USC 103(a)**

Claims 4-9 stand rejected under 35 USC 103(a) as being unpatentable over Shimada et al '288 in view of Kawamura '674. This rejection is respectfully traversed.

In support of the rejection, the Examiner takes the position that Shimada does not teach the undercoat layer containing a compound having a polymerizable group on the molecule, with Kawamura being cited to teach the use of an organic undercoat layer.

In response, rejected claims 4, 6 and 8 depend from claim 1. As claim 1 is patentable for the reasons discussed above, these claims should also be found to be patentable. Rejected claim 5 is amended to correspond to claim 4, but with a different claim dependency. Regarding claims 6 and 7, these claims recite an undercoat layer where the compound having a polymerizable group on the molecule also has on the molecule an ethylene oxide group, a limitation not taught by Kawamura.

The rejection is thus without basis and should be withdrawn.

**Rejection of Claims 10 and 11 under 35 USC 103(a)**

Claims 10 and 11 stand rejected under 35 USC 103(a) as being unpatentable over Shimada et al '288 in view of Crutchfield et al '018. This rejection is respectfully traversed.

In support of the rejection, the Examiner takes the position that "it is well known in the art to physically separate reactants of a light sensitive imaging layer by encapsulating one or more of the reactants so as to prevent any chemical reactions among those reactants prior to an imaging step, as evidenced by Crutchfield."

However, applicants find advantage in encapsulation, not to prevent chemical reactions, but to obtain good on-machine development properties.

The cited references thus lack the requisite motivation to result in the claimed invention.

The rejection is thus without basis and should be withdrawn.


In view of the above, the application is believed to be in condition for allowance.

Application No. 10/809,323

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

By   
Marc S. Weiner #32,181

MSW/JWH/sh  
1110-0318P

P.O. Box 747  
Falls Church, VA 22040-0747  
(703) 205-8000